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AUTHOR
Stogdill, Ralph M.; Bailey, Walter R.

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ABSTRACT
This study was designed to determine whether viewing and discussing five movies, each depicting a different pattern of supervisory behavior, would enable maladjusted students to react more favorably to supervision. Patterns of behavior were: (1) consideration of employees, (2) structuring expectations, (3) tolerance of freedom of action, (4) production emphasis, and (5) representation of the interests of the group. Small groups composed equally of well-adjusted and poorly-adjusted high school students viewed the movies and then engaged in free discussion without any attempt by researchers to influence student attitudes towards the supervisory role being discussed. Approximately 8 weeks after discussing the movies, the students were rated again by the teachers on adjustment to supervision. Poorly-adjusted boys in the experimental group gained more in ratings of adjustment to supervision than did poorly-adjusted control groups that did not see the movie. Teachers tended to adjust their second ratings downward, however the experimental groups lost less than the control groups. The results for all groups, except well adjusted girls, favored the experimental groups that saw and discussed the movies. It was recommended that the movies be used further in training and research. (DM)

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CHANGING THE RESPONSE OF VOCATIONAL STUDENTS TO SUPERVISION

THE USE OF MOTION PICTURES AND GROUP DISCUSSION

RALPH M. STOGDILL
The Ohio State University

WALTER R. BAILEY
Macon Junior College

SEPTEMBER 1969

The Center for Vocational and Technical Education
The Ohio State University
1900 Kenny Road
Columbus, Ohio 43210

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PREFACE

Workers and young people who are training for work need know not only the technologies of their jobs, they also need to know how to get along with their supervisors and fellow workers. Followup studies suggest that additional emphasis needs to be placed on teaching human relations skills. This is especially true in aiding maladjusted youth in making an effective transition from school to work.

This report is concerned with the development of a brief, moderately high-impact training method, designed to assist alienated students to respond more favorably to supervision of their work. Results of the research suggest that the method offers considerable promise for training in the acceptance of supervision. If maladjusted students can be helped to respond more favorably to supervision, what is the responsibility of vocational education in this area? It is hoped that this research project will stimulate a re-examination of the philosophy, content and procedures of vocational curricula.

This report was prepared by Ralph Stogdill, professor of administrative science, The Ohio State University and Walter R. Bailey, dean of students, Macon Junior College. Acknowledgment is given to H. D. Brum, supervisor of vocational education for the State of Ohio Department of Education, and Robert E. Campbell, occupational psychology specialist, The Center for Vocational and Technical Education, for their review of the manuscript.

Robert E. Taylor

Director
The Center for Vocational
and Technical Education

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R.M.S.

W.R.B.

SUMMARY

This study was designed to determine whether viewing and discussing five movies, each depicting a different pattern of supervisory behavior, would enable maladjusted students to react more favorably to supervision.

Scenarios were prepared and movies produced to depict the following patterns of supervisory behavior: Consideration of Employees, Structuring Expectations, Tolerance of Freedom of Action, Production Emphasis, and Speaking as Representative of the Group. The movies were shown to small groups composed equally of well adjusted and poorly adjusted students, as determined by teachers' ratings. After seeing the movies, the students engaged in free discussion without any attempt by the researchers to influence students' attitudes toward the supervisory role being discussed. Some groups expressed favorable attitudes, while others expressed unfavorable attitudes toward the same role. Approximately eight weeks after discussing the movies, the students were rated again by their teachers on adjustment to supervision.

Poorly adjusted boys who discussed the movies in three different schools gained more in ratings of adjustment to supervision than did the poorly adjusted control groups that did not see the movies. All well adjusted groups were rated lower on the second rating than on the first as a result of tendency by the teachers to adjust their second ratings downward. However, the experimental groups lost less than the control groups.

All poorly adjusted experimental groups of boys gained more in adjustment to supervision than did the control groups. All well adjusted experimental groups of boys lost less than did the control groups of well adjusted boys. The experimental group of poorly adjusted girls lost less than their control group, but the reverse was true for all well adjusted girls. The results for all groups, except well adjusted girls, favor the experimental groups that saw and discussed the movies. It is concluded that the above results justify further use of the movies in training and research.

CHANGING THE RESPONSE OF VOCATIONAL STUDENTS TO SUPERVISION

THE USE OF MOTION PICTURES AND GROUP DISCUSSION

I INTRODUCTION

Vocational education is designed to prepare students for careers in various occupations. Mechanization has not yet eliminated the necessity for human labor. Rather, it has increased the necessity for training in the technologies of work. The transition from brute labor to mechanization has been accompanied by the concentration of populations in urban centers and by the crowding of workers into factories, offices, stores, and other places of business. Technologies that involve large numbers of workers performing similar tasks require management and supervision. Workers must adjust to each other and to their supervisors. Garbin, Campbell, Jackson, and Feldman (1967) presented survey findings which suggest that the maladjustment of secondary students in the work place may be more highly related to poor interpersonal skills than to inadequate technical skills. Garbin, Jackson, and Campbell (1968) and Stogdill (1966) reviewed research literature which tends to support the above conclusion.

Irresponsibility, absenteeism, disinterest, and lack of motivation are frequently encountered in the transition from school to work. The student who resents supervision at home and at school is likely to be a frequent job changer and to present problems to his supervisors in one job after another. Although the actual percentage of maladjusted workers may not be large, it accounts for a disproportionately large share of the problems encountered by supervision and management.

The maladjusted worker is usually an unhappy and dissatisfied worker. Any successful effort that can be made to assist the worker to adjust more adequately to job, supervisor, and fellow workers might be expected to increase his satisfaction and happiness. The increase of worker satisfaction is in itself a legitimate goal. Moreover, increased satisfaction is usually associated with decreases in absenteeism, turnover, and disciplinary incidents.

If the line of reasoning here being developed is valid, it would seem desirable to develop methods of training that will assist young people in their adjustment to the interpersonal aspects of work and supervision.

THE PRESENT STUDY

The purpose of the present study was to determine whether short periods of discussion, based on motion pictures that depict different patterns of supervisory behavior, would be effective in improving the response of students who are rated by their teachers as responding poorly to supervision.

METHOD. The method involved the production of a set of motion pictures that depict different patterns of supervisory behavior. A different movie was shown each day over a period of five days to small groups composed equally of students rated high and others rated low in reaction to supervision. Immediately after the showing, each movie was discussed for a period of 40 to 50 minutes. No attempt was made by the researchers to influence the attitudes of students toward any pattern of behavior. The control groups did not see or discuss the movies.

The use of motion pictures makes it possible to present the same role performance to different groups of subjects. The subjects do not themselves engage in role playing. Rather, they are given an opportunity to observe, and familiarize themselves with, react to, and discuss, several patterns of supervisory behavior. These patterns of behavior have been shown to be related to employee satisfaction and work group performance (Stogdill and Coons, 1957; Stogdill, 1965).

RATIONALE. The young person who resents supervision is likely to have experienced failure and discouragement in his academic courses. He often comes from a home in which the teacher is regarded as an extension of parental authority rather than as a person who is interested in helping him to learn (Strom, 1964). He tends to become estranged from his parents as well as from his teachers and resents the perceived arbitrariness and restrictiveness of the discipline imposed by them (Cervantes, 1965). He tends to be a disciplinary problem in school and often seeks to drop out in order to gain release from an unpleasant situation (Holt, 1964; Bowman and Matthews, 1960). The unfavorable attitudes toward supervision acquired at home and school, when carried into the work situation, make it difficult for him to adjust to supervision on the job (Hall and McFarlane, 1963). Since job training involves detailed instruction, checking of performance, and correction of errors, the maladjusted vocational trainee is likely to perceive them as further extensions of home and school discipline, and thus tend to resent them.

Most of the human relations training programs in industry are designed to help supervisors and managers to become more highly sensitized to, and considerate of, their employees. Essentially nothing is done to enable employees to react more understandingly and favorably to supervision. The vocational curriculum is more likely to teach a student the skills and technologies of a trade than to prepare him to understand the significance of supervisory authority and interpersonal stress in the work place.

The present research is based on the general hypothesis that if the vocational student can be enabled to gain some insight into the personal motivations and organizational demands that underlie a particular pattern of supervisory behavior, he will be able to react more favorably. Thus, the films were designed to facilitate insight rather than to induce emotional catharsis. An attempt was made in developing the scenarios and selecting the actors to prevent the student from identifying himself with, or opposing himself to, either the supervisor or the people supervised. In other words it was hoped, insofar as possible, to avoid transferring to the supervisors in the movies any of the student's prior unfavorable reactions to authority and supervision.

HYPOTHESES. The research is based on two assumptions. It is assumed, first, that group discussion may result in insight into behavior and, second, that insight may lead to change in attitudes and behavior. For purposes of this research, it is regarded as more important to change objective response to supervision than to change attitudes toward supervision. The first hypothesis to be tested is that maladjusted students will react more favorably to supervision after seeing and discussing the movies.

Another hypothesis was concerned with the possibility of changing preferences for different styles of supervision. The Ideal Form of the Leader Behavior Description Questionnaire (Halpin, 1957; Stogdill, 1962) was administered before training and after training. The Ideal Form asks, "How ought the leader behave?" Subjects' responses to the items indicate which forms of behavior they prefer. Particular attention was paid to changes in preferences for behaviors that correspond with the five roles presented by movies in the training sessions. These roles are identified as high on (a) Consideration, (b) Structuring Expectations, (c) Tolerance of Freedom of Action, (d) Production Emphasis, and (e) Representation of the Interests of the Group.

It was hypothesized that the poorly adjusted trainee would exhibit a greater dislike in the pretest for Initiating Structure and Production Emphasis than would the well adjusted trainee and that he would exhibit a greater preference for Consideration and Tolerance of Freedom than would the well adjusted trainee. It was hypothesized that one of the effects of discussing the movies would be to reduce the degree of preference of poorly adjusted trainees for Consideration and Tolerance of Freedom. It might be further hypothesized that those trainees who exhibit the latter change in preference will adjust better to supervision after discussion than those who do not change.

The primary concern of the research was to change behavior. Attitude change, as measured by students' responses to a questionnaire, was of interest only in so far as it could be associated with behavior change as observed by the students' teacher-supervisor.

Individual styles of interaction with other persons, particularly authority figures, are not easily or quickly changed by any known methods of training or therapy. It may have been over-optimistic to hope that five discussion sessions would cause any marked change in behavior. Nevertheless, it seemed worthwhile to test the possibility.

II REVIEW OF LITERATURE

Numerous methods have been devised for the purpose of changing attitudes and behavior. Lectures, individual counseling, group discussion, role playing, sensitivity training, viewing motion pictures, and the like, have been shown to be effective in changing attitudes. It has not been clearly demonstrated that all of these methods exert lasting effects on overt behavior.

THE USE OF FILMS TO MODIFY ATTITUDES

Films have been used to facilitate attitude and behavior change in groups of varying size and content. Earlier studies (Peterson and Thurstone, 1932; Rosenthal, 1934; Jones, 1934; McFarlane, 1945; Wiese and Cole, 1946; and Rosen, 1948) investigated social attitudes held by elementary and high school students and examined changes in these attitudes after viewing a film which presented information relating to the attitudes under study. Although the films presented students with information and perspectives on current social issues which deviated from the general population norm, a significant change was usually obtained.

Wiese and Cole (1946) examined the information and beliefs held by high school students regarding the differences between American and Nazi ways of living and noted the changes in the information and beliefs created by viewing the motion picture, "Tomorrow The World," which depicted the Nazi way of life. The subjects were asked to complete, before and after viewing the film, an inventory comprised of open-ended items dealing with the following types of topics: treatment of Jews, place of women and girls in the family and nation, military training for children, attitudes toward government officials, and the use of fear in the home and nation. The changes on most of the topics were not large, although more thorough and sophisticated answers were evidenced on the posttesting. There were significant differences on the first and last topics between the two testings. No change was demonstrated in the responses of a control group.

More recent studies investigated the use of films to modify attitudes with a wider range of subjects, in an increasing variety of settings, and for multifarious objectives (Staudahar and Smith, 1956; Harriman, 1956; Denny, 1959; Walters, Thomas and Acker, 1962; Winick, 1963; Levonian, 1963; Auster, 1964; Englander, 1965; Bond, 1965; Zagona, 1966; Sullivan, 1967). Although the studies shared a common purpose--to determine the effects of a film on selected attitudes of the subjects--they differed with respect to objectives, setting of the study, subjects, type of movie (whether factual or attitudinal), group procedures used in conjunction with the movies, analysis of data, and followup procedures.

Harriman (1956) designed a study to determine whether group-centered therapy and selected mental health films used alone and in combination would effect changes in the following attitudes: enjoyment of interpersonal relationships, emotional stability, strength of character, understanding of motives and feelings of self and others, estimate of personal worth, and hostility. The 87 subjects were assigned to one of four experimental conditions: group therapy, film showings, film showings followed by group therapy, and no treatment. It was concluded that group therapy and the viewing of mental health films did not effect changes in the attitude items of the study. Conversely, Staudahar and Smith (1956) found that Air Force trainees hearing lectures on discipline and viewing a film exhibited significantly more favorable attitudes toward military discipline than those who did not.

Denny (1959) attempted to determine the effectiveness of selected motion pictures in reducing frustration in junior high school students. Control and experimental groups were pretested with the California Test of Personality (Form AA) and Form BB was used as a posttest after the experimental group had viewed guidance motion pictures, one each day for six consecutive school days. It was concluded that the motion picture appeared to have an effect in reducing the frustration of students.

Several recent studies investigated the efficacy of films in modifying attitudes toward educational and vocational choice when used in conjunction with group counseling or discussion. Englander (1965), using Super's self-concept model as a theoretical base, attempted to influence students' choices of vocations by combining a vocational (teaching) demonstration, a film and group counseling into a "career-day" program. The career day was spent as follows:

1. A thorough teaching demonstration was presented.

2. The movie, "Passion for Life," was shown which portrayed the story of a young teacher striving successfully to overcome traditional methods and social pressures.

3. Group counseling ensued, discussing the movie and mathematics in general.

Data from pretesting and posttesting indicated that students' perceptions of teachers and of self became significantly more congruent after the career day, but attitudes toward mathematics teaching *per se* were unchanged.

Likewise, Sullivan (1964) was successful in modifying the attitudes of capable high school girls toward college, through the use of selected film and counseling experiences. It was demonstrated that among low-motivation subjects only, the mean attitude score on the posttesting for students who viewed the film and were counseled individually was significantly higher than for subjects who viewed the film and were counseled in groups. The increase in attitude scores was greater for both experimental groups than for a control group, but there was no indication that any treatment actually influenced any of the subjects to apply for college admission.

In yet another approach, Levonian (1963) investigated opinion change as mediated by an audience-tailored film. The development of the film

was based on the prefilm opinions of 540 university students. The film effected changes in opinion substantially greater than were reported in most studies. In preparing an audience-tailored film, the scenario may be constructed in such a way as to facilitate the greatest amount of attitude change relative to the personalities, needs, and opinions of the subjects.

The development of theory and research on attitudes and attitude change has been progressive and has enabled psychologists and educators to deal more effectively with such problems as situational frustration and educational and vocational adjustment. However, it would seem that the potential of such research has been realized only to a limited degree. Areas of research might well include the training of the culturally disadvantaged and the training of the high school dropout. It would appear that films tailored for the specific needs of an audience can be highly effective in producing desired attitude changes.

THE USE OF GROUP DISCUSSION TO MODIFY ATTITUDES AND BEHAVIOR

A number of studies investigated the effects of undirected group discussion or compared undirected discussion with other methods of changing attitudes and behavior.

Miller and Briggs (1958) investigated the effectiveness of undirected group discussion about racial groups in modifying racial attitudes when the discussion groups were sociometrically structured. Groups of elementary students considered high and low in cohesion participated in 30-minute sessions in which children of other countries and other races were discussed. Pretests and posttests indicated significant and stable changes in the racial attitudes of subjects in the experimental group.

Davis (1959), Kemp (1962), and Jesse and Heiman (1965) designed studies in which it was possible to determine and compare the effects of group discussion and individual counseling on the attitudes and behavior of selected groups of students. Davis (1959) demonstrated that group guidance or group discussion was more effective than either individual counseling or no treatment in changing the citizenship behavior of students in the classroom. Conversely, Jesse and Heimann (1965) found individual counseling more effective than group discussion in changing the attitudes and behavior of eighth-grade students with regard to vocational maturity, self-information, and occupational information.

Group discussion was the primary method of attitude and behavior change in investigations reported by Gutsch and Bellamy (1966), Leib and Snyder (1967), and Householder and Seuss (1965). Gutsch and Bellamy (1966) explored changes occurring when a problematic student was part of a discussion group and investigated whether these changes could be attributable to the group setting. It was found that group discussion with the purpose of modifying attitudes was instrumental in maintaining a pattern of change which reflected stability among the experimental group participants during the followup period.

Leib and Snyder (1967) compared group discussion with a lecture on self-actualization as methods of improving school grades and scores on the

Personnel Orientation Inventory. It was concluded that differences between the two treatments could not be observed because of the Hawthorne effect. Householder and Seuss (1965) showed that group discussion was effective in altering the attitudes of industrial education students, but that the quality of group influence was usually no better than the performance of the "best" individual within the group.

Results of the studies reported above suggest that lectures, individual counseling and group discussion are effective methods for changing attitudes. However, none of these studies clearly demonstrated that any of the methods produce lasting change in overt behavior.

III METHOD

The present research was carried out in four stages described in this chapter:

1. Production of a set of motion pictures to be used for training purposes.

2. Pretests of the movies.

3. Selection of the samples.

4. Administration of the experiment: discussion of the movies by students in three vocational high schools; administration of ratings and attitude scales before and after training.

The most difficult and time-consuming stage was the production of the motion pictures.

PRODUCTION OF A SET OF MOTION PICTURES

It was desired to produce a set of movies each of which would depict a different pattern of supervisory behavior. The Leader Behavior Description Questionnaire (LBDQ), developed by staff members of The Ohio State Leadership Studies, is a thoroughly researched and widely used instrument for measuring leader behavior. Stogdill and Coons (1957) and Stogdill, Goode, and Day (1962, 1963) described the development and use of the LBDQ. The latest form consists of 12 subscales each composed of five or 10 items. Each subscale describes a pattern of behavior isolated by factor analysis. It was decided to use motion pictures to depict each of the following patterns of leader behavior:

Representation:	Speaks and acts as representative of the group.
Influence with Superiors:	Gets along well with superiors and has influence with them.
Structuring Expectations:	Lets followers know what he expects of them and what they can expect of him.
Tolerance of Freedom:	Tolerates and encourages initiative and freedom of action in followers.
Consideration:	Looks out for the welfare of followers and acts on their suggestions.

Production Emphasis: Pushes hard and persistently for productive output.

The items in each subscale were used as a basis for writing a scenario which would enable a supervisor to act out the behaviors described by the items. It was intended not to develop a plot, but rather to present the supervisor and two subordinates in a series of incidents that would provide the supervisor with opportunities to display the behaviors described by the items in a single subscale. Thus, each scenario was written to present a rather stereotyped and, perhaps, somewhat monotonous repetition of the same pattern of behavior. It was desired, but not possible, to exclude entirely all other patterns of behavior.

A group of adult actors, some of whom were television announcers and others of whom were businessmen actively engaged in local dramatic productions, was recruited to participate in the movies. The same staging was used for all the movies. A supervisor and two subordinates were seated at a table in what appears to be an office in an industrial plant. The title materials preceding each movie were made as inconspicuous and non-informative as possible in order to minimize the possibility of prejudicing the attitudes of a possible viewer by attaching value-laden titles to the different roles.

PRETESTS OF THE MOVIES

In order to make certain that there were perceivable differences between the six patterns of behavior, each actor was required to play two different roles and four of the scenarios were acted by two different sets of actors. That is, two different sets of movies were produced. The combination of roles and actors is listed below.

Role	Actor in Set I	Actor in Set II
Representation	A	
Influence		A
Consideration	B	D
Structure	C	E
Freedom	D	C
Production	E	B

Each set of five movies was shown to a group of seven graduate students who acted as observers and describers. After viewing a movie, the group was asked to describe the behavior of the supervisor, using the LBDQ. Another movie was then shown and the behavior of the supervisor was described. No significant difference was found between the descriptions of different leaders playing the same role. However, significant differences were found between the descriptions of the same leader playing two different roles. These results were interpreted (Stogdill,

1969) as indicating that the movies do in fact portray patterns of behavior that are perceived to be different one from the other.

The movies also were shown to a small group of vocational students in a local high school for the purpose of pretesting and revising the methods for conducting discussions of the movies. Due to the fact that several procedural changes were suggested by the pretest, none of the results of the pretest research are reported herein.

SELECTION OF THE SAMPLES

The research was conducted in three different vocational high schools. The schools were as follows:

School A, with more than 500 students, all males, occupied the unused facilities of a military air base. The research schedule in this school was disrupted by severe storms, innoculations, a blood donation program, and other unforeseen difficulties. As a result, the number of participating students (32 boys) was smallest in this school.

School B was located in the business district of a highly industrialized city. Approximately 450 students, male and female, were enrolled in the school. Fifty-one boys and 49 girls from School B participated in the study.

School C, enrolling approximately 1,100 male and female students, served several adjacent counties. Students were enrolled in their local high schools and were brought to the vocational high school by bus. Sixty-one boys participated in the research. The number of girls participating was too small to justify analysis of their data.

Before the movies were shown, teachers were asked to rate all the students in their classes using the Behavior Description Scale shown in the Appendix. This scale includes 10 items designed to measure adjustment to supervision and 10 items to measure adjustment to work. Only the 10 items in the adjustment to supervision scale were used to select subjects for the experiment. Approximately 370 students were rated in each of the three schools with results as shown in Table 1.

The sample, for boys, was drawn from students enrolled in industrial and mechanical classes. Boys enrolled in courses such as accounting, drafting, and computer operation and programming were omitted from the study because they were regarded as generally well adjusted to supervision. In other words, an attempt was made to draw the sample from classes in which the students varied considerably in adjustment to supervision. In each school, the number of students who were rated by their teachers is smaller than the number actually enrolled in the school.

Students were regarded as "poorly adjusted" if they received low scores on the adjustment to supervision scale. They were regarded as "well adjusted" if they received high scores on the scale. Table 1 reveals that the scores for each school were highly skewed toward the well adjusted (high) end of the scale. The number of students with very low scores was so small that it was necessary to assign to the "poorly adjusted" groups a

number of students with higher adjustment scores than was desired for comparative purposes.

TABLE I

Distribution of Pre-experiment "Adjustment to Supervision" Scores for the Student Groups from which Subjects were Selected.

	School A		School B		School C	
Score	n	%	n	%	n	%
46 - 50	*	*	183	48.4	190	51.3
41 - 45	270	72.0	98	25.9	66	17.8
36 - 40	53	14.2	48	12.7	72	19.5
31 - 35	22	5.9	29	7.6	19	5.1
26 - 30	17	4.5	13	3.4	11	2.9
21 - 25	2	.5	7	1.8	11	2.9
16 - 20	8	2.1			1	.3
11 - 15	2	.5				
6 - 10	1	.3				
Total	375	100.0	378	99.8	370	99.8

*Only nine of the 10 items were scored in School A. For this reason, the maximum score for School A is 45.

A list of students with the lowest score was prepared in each school. A second list was prepared containing the names of students with the highest possible scores. An attempt was made to draw the high scoring students from the same classes in which the low scoring students were located. That is, if two students with low scores were drawn from a class taught by teacher X, two students with high scores were drawn from the same class. Students with odd numbers opposite their names were assigned to the experimental groups. Those with even numbers were assigned to the control groups. Thus, the poorly adjusted (low-scoring) students were assigned in approximately equal numbers to experimental and control groups. The well adjusted (high-scoring) students were similarly assigned to experimental and control groups.

No student was required to participate if he expressed any reluctance to do so. A few students who declined were almost uniformly those who had received low adjustment to supervision scores.

ADMINISTRATION OF THE EXPERIMENT

TESTING INSTRUMENTS. The Behavior Description Scale, used by teachers to evaluate the adjustment of students to supervision, was developed for use in this research. Pre-experimental scores on this scale were used to assign students to experimental and control groups. It was administered again eight to 10 weeks after the movies were shown to determine whether any change in adjustment to supervision had occurred.

The questionnaire, "What the Ideal Leader Should Do," is a form of the LBDQ previously developed by staff members of the Ohio State Leadership Studies. This questionnaire was administered to both the experimental and control groups of students before the movies were shown to the experimental groups. It was administered again to both groups eight to 10 weeks after the movies were shown. This questionnaire was used to determine whether any change had occurred in students' attitudes toward different patterns of supervisory behavior. The questionnaire includes five subscales: Representation, Structuring Expectations, Consideration, Tolerance of Freedom, and Production Emphasis. A copy of the questionnaire is shown in the Appendix.

DISCUSSION OF THE MOVIES. The discussion (experimental) groups consisted of eight to 10 students, half of whom had received high-adjustment scores and the other half low-adjustment-to-supervision scores. In School A, groups consisted entirely of boys. Boys and girls were in separate groups in School B, while boys and girls were mixed together in the same groups in School C.

A movie was shown at the beginning of each session. The meeting then was thrown open for discussion. The discussion sessions were conducted by the junior member of the research team who had available a set of questions, prepared in advance by the research staff, to keep discussion moving in case it bogged down. Sessions lasted 40 to 50 minutes with some groups able to maintain spontaneous discussion while others required occasional encouragement and questions to keep the discussion moving. No attempt was made to elicit, encourage, or reinforce the expression of favorable or unfavorable attitudes toward any pattern of leadership behavior. The five movies were presented in different order for each of the schools.

RETEST AFTER DISCUSSION. Approximately eight to 10 weeks after discussion, the Ideal Form of the LBDQ was administered again to both the experimental and control groups in Schools B and C. Teachers' ratings on the adjustment to supervision and adjustment to work scales were obtained again in each of the three schools. In the posttest, as in the pretest, each teacher rated all the students in his class, even though only one or two of his students might be in the experimental and control groups. This procedure was followed in order to minimize the possibility that teachers might rate students more favorably the second time if they had been singled out for special attention.

Behavior change should persist over a period of at least several weeks if one is to claim that it is in any way permanent. However, the greater the length of time that elapses between the experimental attempt to change behavior and the attempt to measure the change, the more difficult it becomes to attribute any observed change to the experimental attempt. Emotionally charged and traumatic events experienced by the student or by his close associates at home, at school, or in the community, can produce marked changes in behavior. In attempts to measure behavior change that is to be attributed to a specific source, it would seem desirable to reduce to a minimum the opportunities for events other than the experimental events to influence behavior. This can be accomplished best by reducing the time between attempt to effect change and attempt to measure change. A short interval of time also prevents a large shrinkage in sample size due to withdrawals from school. It was decided, after consultation with several school officials, that an interval of six to 10 weeks between discussion of the movies and attempt to measure change would be appropriate for the present research.

SUMMARY OF RESEARCH STEPS

1. A set of five motion pictures, each depicting a different pattern of supervisory behavior, was produced and pretested for the research.

2. The cooperation of three vocational high schools was obtained.

3. Teachers rated students on adjustment to supervision.

4. Students receiving low ratings, and therefore designated "poorly adjusted," were assigned to experimental and control groups.

5. An equal number of students receiving high scores, and designated "well adjusted," was assigned to experimental and control groups.

6. Experimental groups were subdivided into subgroups consisting of four or five "well adjusted" and four or five "poorly adjusted" students.

7. The questionnaire "What an Ideal Leader Ought to Do" was administered to all students in the experimental and control groups.

8. Five movies, one per day over a period of five consecutive days, were shown to the experimental subgroups. The students discussed the behavior of the leaders shown in the movies. The movies were not shown to the control groups.

9. Six to eight weeks after the movies were shown, the teachers again rated all the students in their classes on the adjustment to supervision scale.

10. After the teachers' ratings had been collected, the questionnaire "What an Ideal Leader Ought to Do" again was administered to students in the experimental and control groups.

IV RESULTS

The hypotheses of the research are concerned with change in seven different variables that were measured immediately before discussion of the movies and again eight to 10 weeks after discussion. The several variables were:

Teachers' ratings of student adjustment to:

1. Supervision
2. Work

Students' attitudes toward supervisory behavior patterns emphasizing:

3. Representation
4. Structure
5. Tolerance of Freedom
6. Consideration
7. Production

The central hypothesis emphasized change in adjustment to supervision. The hypotheses concerning change in adjustment to work and change in attitudes toward leader behavior were subsidiary concerns. It is the belief of the authors that training can be said to have accomplished something if it produces change in observed behavior. Although attitude change may be desirable, change in attitude is not always converted into behavior change. Thus, insofar as the present research is concerned, we shall be interested primarily in the ratings of behavior (adjustment to supervision).

ADJUSTMENT TO SUPERVISION: BOYS

Teachers rated their students on adjustment to supervision immediately before discussion of the movies, and again eight to 10 weeks later. Average ratings of adjustment to supervision for boys with low scores are shown in Table 2. The experimental group obtained a mean rating of 30.11 before discussion of the movies and 32.74 after discussion.

TABLE 2

Means and Standard Deviations for 72 Boys with Low Adjustment to Supervision Ratings.

		Before		After			
Group	N	M1	SD	M2	SD	M2 - M1	p
Exper-Lo	35	30.11	3.64	32.74	6.40	2.63	.05
Contr-Lo	36	30.97	4.27	32.31	5.30	1.34	ns

The difference is significant at the .05 level. The second rating (32.31) for the control group was also somewhat higher than the first (30.97), but the difference is not statistically significant. Due to the small numbers of cases in each school, no significant differences were obtained between the before and after tests for either the experimental or control groups when tested for each school separately.

The high-scoring students on adjustment to supervision were included in the discussion groups in order that 1) the low-scoring students would not feel singled out for special treatment, and 2) the high-scoring students might possibly contribute constructively to group discussion. The high-scoring students, with two or three exceptions, obtained the maximum possible ratings (45 in School A, and 50 in Schools B and C). The research was not designed to change their behavior, nor was it possible for them to obtain higher scores on the second rating than on the first. The average ratings for the experimental and control groups are shown in Table 3.

TABLE 3

Means and Standard Deviation for 73 Boys with High Scores on Adjustment to Supervision.

		Before		After			
Group	N	M1	SD	M2	SD	M2 - M1	p
Exper-Hi	36	48.64	2.07	45.86	3.51	-2.78	.01
Contr-Hi	37	48.68	2.10	44.95	4.93	-3.73	.01

All groups with high initial ratings were rated significantly lower after discussion of the movies than before. The differences were statistically significant for each school and for all schools combined.

The fact that both the experimental and control groups of well adjusted students were rated lower on adjustment to supervision on the second rating than on the first suggests that teachers may have adapted to the rating scale in such a manner as to adjust their evaluations downward on the second round of ratings. The larger standard deviations obtained for the second ratings than for the first suggest that the teachers were more discriminating in differentiating among students on the second rating. In order to test the above assumption, a random sample of 20 students in School A was drawn from the school population that had been assigned neither to the experimental nor to the control groups. The mean was 41.75 on the first rating and 36.00 on the second. The difference is significant at the .01 level. These results suggest that the instructors did in fact adjust their ratings more than five points downward on the scale during their second round of ratings. The standard deviations are markedly larger for the second rating than for the first, suggesting that the teachers were much more discriminating on the second rating.

In summary, the results indicate that the low-scoring experimental group gained significantly in adjustment to supervision, whereas the control group did not. Both the experimental and control groups with initially high ratings were rated lower on the second rating than on the first. However, the differences for the experimental group were smaller than the differences for the control group. In other words, the poorly adjusted experimental group gained more in adjustment to supervision than did the poorly adjusted control group, while the well adjusted experimental group lost less in adjustment than did the well adjusted control group. These results suggest that both the high and low experimental groups, when compared with their respective control groups, gained in adjustment to supervision as a result of seeing and discussing the movies.

ADJUSTMENT TO SUPERVISION: GIRLS

Results for girls in School B are shown in Table 4. It will be noted that all groups of girls were rated lower on the second evaluation than on the first, but none of the differences was statistically significant. The poorly adjusted experimental group was rated down by 3.36 points, while its control group was rated down by 5.58 points. The general tendency to rate students lower on the second evaluation than on the first was particularly prevalent in the case of female students.

TABLE 4

Ratings of Adjustment to Supervision--Means and Standard Deviations
N = 49 Girls in School B.

		Before		After			
Group	N	M1	SD	M2	SD	M2 - M1	p
Exper-Lo	11	35.18	4.12	31.82	11.98	-3.36	ns
Contr-Lo	12	38.08	4.58	32.50	8.50	-5.58	ns
Exper-Hi	12	48.58	1.44	46.33	3.82	-2.25	ns
Contr-Hi	14	49.14	1.46	47.71	3.83	-1.43	ns

ADJUSTMENT TO WORK

The means and standard deviations of teachers' ratings of adjustment to work are shown in Table 5. The students were grouped according to their initial ratings on adjustment to supervision. It will be noted that the experimental and control groups that were rated low in adjustment to supervision were also rated low in adjustment to work. Those who were rated high in adjustment to supervision tended to be rated high in adjustment to work. None of the differences was statistically significant. There was a general tendency for the low-rated groups to gain and for the high-rated groups to lose very slightly on adjustment to work. It is apparent that seeing and discussing the movies had little impact on adjustment to work.

TABLE 5

Ratings of Adjustment to Work--Means and Standard Deviations N = 144 Boys.

		Before		After			
Group	N	M1	SD	M2	SD	M2 - M1	p
Exper-Lo	35	31.43	6.24	32.34	5.89	.91	ns
Contr-Lo	36	31.56	4.74	33.28	6.01	1.72	ns
Exper-Hi	36	46.31	4.57	46.03	4.29	- .28	ns
Contr-Hi	37	46.08	3.84	45.85	4.16	- .23	ns

The results for girls are shown in Table 6. Both the low-rated experimental and control groups tended to be rated lower in adjustment to work, while the reverse was true for the high-rated groups. None of the differences is statistically significant. It is apparent, as it was with the boys, that the movies had little effect on adjustment to work.

ATTITUDES TOWARD LEADER BEHAVIOR

The Ideal Leader Behavior Description Questionnaire asks students to respond to a list of items by indicating the extent to which an ideal leader ought to behave as described by the items. The items are scored to obtain scores on the following subscales.

Representation: Speaks and acts as representative of the group.

Structure: Lets followers know what is expected of them.

TABLE 6

Ratings of Adjustment to Work--Means and Standard Deviations N = 49 Girls in School B.

		Before		After			
Group	N	M1	SD	M2	SD	M2 - M1	p
Exper-Lo	11	36.09	5.13	33.91	12.11	-2.18	ns
Contr-Lo	12	37.33	7.70	33.92	9.31	-3.41	ns
Exper-Hi	12	46.75	4.14	46.83	4.00	.08	ns
Contr-Hi	14	47.12	4.30	48.71	2.89	1.50	ns

Freedom: Tolerates freedom of action and discussion among followers.

Consideration: Looks out for the comfort and welfare of followers.

Production: Pushes for high rate of productive output.

The questionnaire was administered to the experimental and control groups of students in Schools B and C before discussing the movies and again six to eight weeks later. The following discussion is based on the results for the low-scoring experimental group of boys. Means and standard deviations are shown in Table 7. No significant difference was obtained between the means of the first and second administration of the questionnaire for either school.

TABLE 7

Means of Ideal Leader Behavior Descriptions for Low Scoring Experimental Group--Boys in Schools B and C.

	School B				School C			
Leader	Before		After		Before		After	
Behavior	M	SD	M	SD	M	SD	M	SD
Representation	39.58	3.60	39.09	4.25	38.77	3.88	39.46	4.72
Structure	43.50	2.88	41.73	3.29	38.92	5.09	39.46	4.56
Freedom	38.17	2.95	38.09	2.77	36.85	5.52	37.08	4.86
Consideration	44.25	3.02	44.82	3.06	42.92	4.87	42.69	3.79
Production	32.50	3.63	33.36	5.16	35.15	4.60	35.08	4.23
N	11		11		13		13	

It was hypothesized that vocational students, particularly those who are responding unfavorably toward supervision, would prefer Consideration and Tolerance of Freedom over Structure and Production Emphasis on the first administration of the questionnaire. This hypothesis was not substantiated. Both schools exhibited the following order of preference.

1st	Consideration
2nd	Structure
3rd	Representation
4th	Freedom
5th	Production

In other words, inspection of the means indicates that Consideration and Structure were the most highly favored forms of leader behavior. Tolerance of Freedom of Action ranked next to last in preference. As expected, Production Emphasis was the least preferred pattern of behavior.

CORRELATES OF CHANGE IN ADJUSTMENT TO SUPERVISION

If change in adjustment to supervision is related to change in attitude toward leadership, it was hypothesized that the relationship will be as follows:

Hypothesis 1. Improved adjustment to supervision will be associated with a reduced preference for Consideration and Tolerance of Freedom after discussion.

Hypothesis 2. Improved adjustment to supervision will be associated with an increased preference for Structure and Production Emphasis after discussion.

These hypotheses are based on the observation that many persons who respond unfavorably to supervision maintain that:

"If he would get off my back I would do all right."

"I don't like to have him looking over my shoulder all the time."

"I know how to do the job as well as he does--maybe better."

"He doesn't think we are human."

"He's always at you to turn out more work."

Such comments suggest that the speakers believe they would be able to perform satisfactorily if they were treated considerately or permitted to do as they please.

The hypotheses were based on the assumption that if students gain a more realistic perception of the supervisor's job, they will realize the need for work that is done according to specifications and in reasonable quantities and will see that not all problems are solved by humane feelings or by allowing a great deal of freedom.

In order to test the hypotheses, difference scores were computed for each student in the sample. His rating on adjustment to supervision at Time 1 (before discussion) was subtracted from his rating at Time 2 (after discussion). A positive difference score indicates that the student was rated higher in adjustment to supervision on the second rating than on the first. A negative difference score indicates a perceived decline in adjustment to supervision. Difference scores were computed for each of the other six variables. The difference score for adjustment to supervision was then correlated with the seven scores before discussion, the seven scores after discussion, and the seven difference (change) scores.

Results for the poorly adjusted experimental group are shown in Table 8. For this group, improvement in adjustment to supervision was associated with low ratings in adjustment to supervision ($r = -.54$) and work ($r = -.43$), before discussion. Improvement was associated with high preferences for Freedom ($r = .33$) before discussion. In other words, those students who improved most in adjustment to supervision were the ones who, before discussion, were rated low in adjustment to supervision and to work. They exhibited a high preference for Tolerance of Freedom.

TABLE 8

Change in Adjustment to Supervision Correlated with Other Variables. Experimental Group with Initially Low Ratings, Schools B & C Combined.

Variable	Before r	After r	Change r
Supervision	-.54	.64	1.00
Work	-.43	.54	.73
Representation	-.24	-.24	.03
Structure	-.24	-.31	-.03
Freedom	.33	.10	-.25
Consideration	-.08	-.26	-.17
Production	.03	-.28	-.30

N = 33
r = .33 is significant at .05 level
r = .45 is significant at .01 level

Improved adjustment was associated with high ratings on adjustment to supervision ($r = .64$) and work ($r = .54$) after discussion. None of the correlations with change in attitude was statistically significant. That is, those who improved the most were the ones who, after discussion, were rated high in adjustment to supervision and to work.

The change score for the experimental group is necessarily correlated 1.00 because the variable is here correlated with itself. Change in adjustment to supervision was correlated .73 with change in adjustment to work. There was a slight tendency for those students who improved in

adjustment to supervision to exhibit a reduced preference for Tolerance of Freedom, Consideration, and Production Emphasis. However, the correlations (-.25, -.17, and -.30) were not statistically significant.

For the control group with low initial ratings and for the experimental group with high initial ratings, improved adjustment to supervision was significantly related to improved adjustment to work. The correlation was not significant for the control group with high initial ratings. Change in adjustment to supervision was not highly related to attitude change for any of the groups.

SUMMARY

The primary aim of the research was to produce change in adjustment to supervision, especially in the poorly adjusted experimental group. The poorly adjusted group was rated significantly higher in adjustment to supervision after discussion of the movies than before. No significant change was obtained for the poorly adjusted control group. These results suggest that discussion of the movies did, in fact, produce some improvement in adjustment to supervision.

Both the experimental and control groups of well adjusted students were rated lower on the second evaluation than on the first. This outcome appears to be the result of a downward adjustment of ratings associated with a greater degree of teacher discrimination on the second rating than on the first. The fact that the experimental group lost less than the control group suggests that discussion of the movies was an advantage to the experimental group of well adjusted students.

There were no significant changes in ratings of adjustment to work. This finding lends further support to the argument that discussion of the movies produced differential effects on adjustment to supervision rather than upon behavior in general.

Difference Scores (Time 2 minus Time 1) were computed to test the hypothesis that change in adjustment to supervision would be associated with change in attitude toward leader behavior. No significant correlation was obtained. However, there was a slight, but nonsignificant, tendency in the poorly adjusted experimental group for improved adjustment to supervision to be associated with a reduced liking for Tolerance of Freedom, Consideration, and Production Emphasis. The results for Tolerance of Freedom and Consideration are in the direction hypothesized. Contrary to hypothesis, the group also exhibited a reduced preference for Production Emphasis after discussion of the movies. Change in attitude toward leader behavior was not related to change in adjustment to supervision in any of the other groups.

In general, the results suggest that discussion of the movies produced significant improvement in adjustment to supervision in the poorly adjusted experimental group for all schools combined. No significant change was obtained for the poorly adjusted control group. The well adjusted group that discussed the movies lost less in adjustment ratings than did the well adjusted control group. Change in attitude toward leader behavior was somewhat more highly related to change in adjustment to supervision for the poorly adjusted experimental group than for any of the other three groups.

V SUMMARY AND DISCUSSION

Five motion pictures, each depicting a different pattern of supervisory behavior, were shown to small groups of students in three vocational high schools. Each movie was discussed for a period of time ranging from 40 to 50 minutes. No attempt was made by the researchers to influence the attitudes of the students in their discussions of any supervisory role. Different groups seeing the same movie varied considerably in the extent to which they liked or disliked the role being portrayed.

Each group consisted of four or five well adjusted and four or five poorly adjusted students. Adjustment was determined by teachers' ratings on an adjustment to supervision scale consisting of 10 items. Students were rated again on the same scale eight to 10 weeks after training. Control groups consisting of both well adjusted and poorly adjusted students did not see or discuss the movies.

The boys who were initially rated low in adjustment to supervision and who discussed the movies (the poorly adjusted experimental group) were rated higher in adjustment to supervision on the second rating than on the first. The differences, although not significant when each school is considered separately, are statistically significant when all schools are combined. No significant differences were obtained for the poorly adjusted control group for individual schools or for all schools combined. These findings suggest that discussion of the movies resulted in an improved response to supervision on the part of those boys who were initially rated low in adjustment to supervision.

Both the experimental and control groups of well adjusted students were rated lower on the second evaluation than on the first. However, the experimental group that discussed the movies lost comparatively less in adjustment ratings than did the control group. Thus, it appears that discussion of the movies proved to be an advantage to the experimental group of well adjusted boys.

The teachers did not use the same anchorage points for their first and second ratings. Their second ratings were adjusted downward on the scale in comparison with the first. However, the tendency to rate lower on the second set of evaluations was not uniform throughout the different degrees of student adjustment to supervision. The well adjusted students tended to lose more comparatively than the poorly adjusted. The downward shift in average anchorage point and the unequal shift at different points on the scale make it difficult to evaluate change in adjustment. Had the same anchorage point been used for the first and second ratings, it would appear that the poorly adjusted experimental group would have gained considerably in comparison with the other groups.

All groups of girls in School B were rated lower in adjustment to supervision on the second evaluation than on the first. The poorly adjusted group that discussed the movies lost less than did its control group. The well adjusted experimental group lost slightly more than its control group. If discussion influenced behavior, the advantage was apparent only for the poorly adjusted experimental group. The lower second ratings cannot be attributed to the influence of the movies, since the control groups that did not see the movies also suffered a decline.

None of the groups showed significant change in ratings of adjustment to work. The experimental and control groups obtained rather similar ratings. Thus, although discussion of the movies exerted a differential impact on the experimental and control groups in regards to adjustment to supervision, no such differential effect was obtained for adjustment to work. This outcome appears to lend further support to the argument that discussion of the movies exerted a specific influence upon adjustment to supervision rather than upon behavior in general.

The Ideal Form of the Leader Behavior Description Questionnaire (LBDQ) was administered to both the experimental and control groups of students immediately before discussion and again eight to 10 weeks after discussion. This scale was used to determine whether change in preference for different patterns of leader behavior might be related to change in adjustment to supervision. Positive change in adjustment to supervision ratings were significant correlated with improvement in ratings on adjustment to work for all groups except the well adjusted control group. Change in adjustment to supervision was not significantly related to change in preference for different patterns of leader behavior. The largest correlations were obtained from the poorly adjusted experimental group in which improvement in adjustment to supervision was correlated with reduced preference for Tolerance of Freedom, Consideration and Production Emphasis. The reduced preference for Consideration and Tolerance of Freedom was in accord with hypothesis; but that for Production Emphasis was contrary to hypothesis.

It was hypothesized that vocational students would prefer Consideration and Tolerance of Freedom over Structure and Production Emphasis. However, it was found that Consideration and Structure were preferred over Tolerance of Freedom and Production Emphasis.

DISCUSSION. The main hypothesis of the research was supported. Poorly adjusted male students were rated as responding more favorably to supervision after discussion of the movies than before. All groups of well adjusted boys and all groups of girls were rated lower on the second teacher evaluation than on the first. With one exception, all groups that discussed the movies lost less than the control groups that did not see the movies. Thus, there is a tendency among both the poorly adjusted and well adjusted groups for the experimental groups to fare better than their respective control groups insofar as change in adjustment to supervision is concerned.

The authors are surprised that any hypothesis received support. Although confident in the general theory and methodology of the research, they were fearful that five discussion sessions might be too few to produce a change in student attitude or behavior. Their fears were

further reinforced by the fact that no attempt was made by the researchers to guide student discussion or to influence student attitude either positively or negatively toward any leadership role. Different groups of students, discussing the same role, exhibited marked variation in the degree to which they liked or disliked the role. They also differed in the motives that they attributed to the supervisor whom they were discussing. The students expressed and reinforced their own attitudes toward each supervisory role. The attitude that was reinforced varied from group to group. If it is assumed that attitude influences overt behavior, then one would not expect uniformity of behavior change among the groups that discussed the movies.

Different groups within the same school expressed markedly different attitudes toward the same movie. For example, some students stated that they would like to work for the supervisor who played the role that was high in tolerance of freedom of action because:

"He has confidence in his men."

"He would be easy to work for."

"He tries to get the men to use their own ideas."

"He lets people have some initiative."

Other students stated that they would not like to work for this supervisor because:

"He puts his work off on the men."

"He wouldn't tell you what to do."

Discussion in some groups was dominated by a single student. In some cases, the dominant student exhibited a generally favorable attitude toward authority and supervision. In other cases, his attitude was essentially negative. There was a tendency for other members of a group to follow the lead of the dominant student. Thus, some groups arrived at a generally favorable attitude toward a given supervisory role. In other groups, the reverse was true. Since each group was permitted to reinforce its own point of view regarding a given pattern of behavior, and since the groups differed in their attitudes, it might not be expected that the results of discussion would exert uniform effects on attitudes or behavior change. It was anticipated that the groups would be quite uniform in their approval of Consideration and Tolerance of Freedom and in their dislike for Structure and Production Emphasis. This expected unanimity did not mater materialize in the discussions.

If it is assumed that insight (understanding) is the major variable that conditions behavior change, then perhaps it would make no difference whether the groups liked or disliked a given role or agreed in their preferences for the role. The relationship between insight and attitude change has not been clearly delineated by the personality theorists. The relation of insight and attitude to change in overt behavior is even less well understood.

The possibility exists that differences between groups in attitude toward the same role may have masked, or averaged out, the effects of attitude on behavior. In future research, it would seem desirable to use directed group discussion to test the effects of attempts to reinforce specified attitudes toward given roles. In one set of groups, attempts would be made to reinforce positive attitudes toward Consideration and Freedom, while reinforcing negative attitudes toward Structure and Production. The opposite attitudes would be reinforced in another set of groups.

The results of the research are sufficiently positive to reinforce the belief of the authors that the movies provide a useful means for improving student adjustment to supervision. Further research is needed to determine whether directed or undirected discussion will be the more effective for producing desired behavior change.

The employer of young persons often finds that much of his time and attention must be devoted to individuals who present unrealistic and unfavorable attitudes toward supervision. These employers agree that it is easier to teach the technical details of the job than to change patterns of personal interaction.

For many a student, the most valuable training that the school could provide would be that which involves him in the process of understanding and coping with the demands imposed by supervision. Such training, if it were incorporated in the vocational curriculum, would need to be based on sound theory and research. Lectures extolling the benefits of being good little boys and girls would hardly be worthwhile. The students themselves would need to be actively involved in the process of gaining insight and understanding.

Well-designed role-playing sessions have proved useful as media for helping the actors and discussants to gain insight into personal interaction problems. The motion pictures used in the present research present standardized role-playing materials for discussion, although none of the discussants is involved as an actor.

It is the hope of the authors that if the present research accomplishes no other purpose, it will call attention to the necessity of making effectively creative efforts in the vocational school toward the design of curriculum for the benefit of students who find it difficult to respond favorably to supervision.

REFERENCES

Auster, D. N. *A comparative study of persuasive techniques in films.* New York: St. Lawrence University, 1964.

Bond, J. H. *Using simulation techniques to change attitudes of education majors toward professional course objectives.* Monmouth, Oregon: Teaching Research Division, Oregon State System of Higher Education, 1965.

Bowman, P., and Matthews, C. V. *Motivations of youth for leaving school.* Washington, D. C.: U. S. Office of Education, 1960.

Cervantes, L. F. *The dropout: causes and cures.* Ann Arbor: University of Michigan Press, 1965.

Davis, D. A. Effect of group guidance and individual counseling on citizenship behavior. *Personnel Guidance Journal,* 1959, *38*, 142-145.

Denny, W. E. A study of the effectiveness of selected motion pictures for reducing frustration in children. *Dissert. Abstr.*, 1959, *19*, 3170-3171.

Englander, M. E. Influencing vocational choice: a pilot study. *Vocational Guide Q.*, 1965, *2*, 136-140.

Garbin, A. P.; Campbell, R. E.; Jackson, Dorothy P.; and Feldman, R. *Problems in the transition from high school to work as perceived by vocational educators.* Columbus, Ohio: The Center for Vocational and Technical Education, The Ohio State University, 1967.

Garbin, A. P.; Jackson, Dorothy P.; and Campbell, R. E. *Worker adjustment: youth in transition from school to work: an annotated bibliography of recent literature.* Columbus, Ohio: The Center for Vocational and Technical Education, The Ohio State University, 1968.

Gutsch, K. U., and Bellamy, W. D. Effectiveness of an attitudinal group approach as a behavior determinant. *School Counselor,* 1966, *14*, 40-43.

Hall, O., and McFarlane, B. *Transition from school to work.* Ottawa, Canada: Roger Duhamel, 1963.

Halpin, A. W. *Manual for the Leader Behavior Description Questionnaire.* Columbus, Ohio: Bureau of Business Research, The Ohio State University, 1957.

Harriman, B. L. *Influence of group centered therapy and mental health films on attitudes of prisoners.* Doctor's thesis, University Park: Pennsylvania State University, 1956.

Holt, E. E. *Ohio study of high school dropouts, 1962-1963.* Columbus, Ohio: State Department of Education, 1964.

Householder, D. L., and Seuss, A. R. Social psychology in action: opinion change in industrial education. *Journal of Industrial Teacher Education,* 1965, *2*, 25-29.

Jessee, B. E., and Heimann, R. A. Effects of counseling and group guidance on the vocational maturity of ninth grade boys. *J. Educ. Research,* 1965, *59*, 68-72.

Jones, V. Influences of motion pictures and moral attitudes of children and the permenance of influence. *Psychol. Bull.,* 1934, *31*, 725-726.

Kemp, G. A. A comparative evaluation of the effectiveness of group guidance and individual counseling with freshmen. *Dissert. Abstr.,* 1962, *22*, 4270.

Leib, J. W., and Snyder, W. U. Effects of group discussion on under-achievement and self-actualization. *J. Counsel. Psychol.,* 1967, *14*, 282-285.

Levonian, E. Opinion change as mediated by an audience-tailored film. *Audiovisual Commun. Review,* 1963, *11*, 104-113.

McFarlane, A. M. A study of the influence of the educational geographical film upon the racial attitudes of a group of elementary school children. *British J. Educ. Psychol.,* 1945, *15*, 152-153.

Miller, K. M., and Briggs, J. B. Attitude change through undirected group discussion. *J. Educ. Psychol.,* 1958, *49*, 224-228.

Peterson, R. C., and Thurstone, L. L. The effect of a motion picture film on children's attitudes toward Germans. *J. Educ. Psychol.,* 1932, *23*, 241-246.

Rosen, I. C. The effect of the motion picture, "Gentleman's Agreement," on attitudes toward Jews. *J. Psychol.,* 1948, *26*, 525-536.

Rosenthal, S. P. Changes of socio-economic attitudes under radical motion picture propaganda. *Archives Psychol.,* 1934, *25*, No. 166.

Rusalem, H., and Darer, H. Vocational counseling of the slow learner. *J. National Assoc. Women Deans and Counselors,* 1960, *23*, 110-116.

Schweitzer, H. C., Jr. Comparison of black and white and color films in the modification of attitudes. *Dissert. Abstr.,* 1963, *24*, 874-875.

Simpson, R. H. Attitudinal effects of small group discussion. *Quar. J. Speech,* 1960, *46*, 415-418.

Staudahar, F. L., and Smith, R. G. The contribution of lecture supplements to the effectiveness of an attitudinal film. *J. Applied Psychology,* 1956, *40*, 109-111.

Stogdill, R. M. Psychological job adjustment. In R. E. Campbell. *Guidance in vocational education*. Columbus, Ohio: The Center for Vocational and Technical Education, The Ohio State University, 1966.

Stogdill, R. M., and Coons, A. E. *Leader behavior: Its description and measurement*. Columbus, Ohio: Bureau of Business Research, The Ohio State University, 1957.

Stogdill, R. M. *Managers, employees, organizations*. Columbus, Ohio: Bureau of Business Research, The Ohio State University, 1965.

Stogdill, R. M. *Manual for the Leader Behavior Description Questionnaire--Form XII*. Columbus, Ohio: Bureau of Business Research, The Ohio State University, 1962.

Stogdill, R. M. The validity of leader behavior descriptions. *Personnel Psychol.*, 1969, *22* (Accepted for publication).

Stogdill, R. M.; Goode, O. S.; and Day, D. R. New leader behavior description subscales. *J. Psychol.*, 1962, *54*, 259-269.

Stogdill, R. M.; Goode, O. S.; and Day, D. R. The leader behavior of corporation presidents. *Personnel Psychol.*, 1963, *16*, 127-132.

Strom, R. D. *The tragic migration: School dropouts*. Washington, D. C.: National Education Association, 1964.

Sullivan, H. J. *The effects of selected film and counseling experiences on capable girls' attitudes toward college*. Monmouth: Teaching Research Division, Oregon State System of Higher Education, 1964.

Tamminer, A. W. An evaluation of changes in parents' attitudes toward parent-child relationships occurring during a televised program of parent panel discussion. *Dissert. Abstr.*, 1957, *17*, 2168-2169

Walters, E. L.; Thomas, E. L.; and Acker, C. W. Enhancement of punitive behavior by audio-visual displays. *Science*, 1962, *136*, 872.

Wiese, M. J., and Cole, S. G. A study of children's attitudes and the influence of a commercial motion picture. *J. Psychol.*, 1946, *21*, 151-171.

Winick, C. Tendency systems and the effects of a movie dealing with a social problem. *J. Gen. Psychol.*, 1963, *68*, 289-305.

Zagona, S. V., and Kelly, M. A. The resistance of the closed mind to a novel and complex audio-visual experience. *J. Soc. Psychol.*, 1966, *70*, 123-131.

APPENDIX

Student's Name _____

BEHAVIOR DESCRIPTION SCALE

Directions: Please use the following items to describe the behavior of the student named above. DRAW a CIRCLE around one of the letters - A B C D E - after each item to show how frequently he behaves as described by the item.

A = Always
B = Often
C = Occasionally
D = Seldom
E = Never

1. Is punctual . . . . . A B C D E
2. Tries hard . . . . . A B C D E
3. Follows instructions carefully . . . . . A B C D E
4. Is interested in his work . . . . . A B C D E
5. Completes assigned tasks . . . . . A B C D E
6. Does high quality of work . . . . . A B C D E
7. Cuts classes . . . . . A B C D E
8. Loafs on the job . . . . . A B C D E
9. Requires close supervision in his work . . . . . A B C D E
10. Has to be told every move to make . . . . . A B C D E
11. Resents being told what to do . . . . . A B C D E
12. Has a chip on his shoulder . . . . . A B C D E
13. Seems to resent authority . . . . . A B C D E
14. Creates disturbances . . . . . A B C D E
15. Becomes angry when mistakes are called to his attention . A B C D E
16. Is insolent and discourteous . . . . . A B C D E
17. Exhibits "know it all" attitude . . . . . A B C D E
18. Exhibits "don't care" attitude . . . . . A B C D E
19. Gets along well with other students . . . . . A B C D E
20. Likes his instructors and supervisors . . . . . A B C D E

BEHAVIOR DESCRIPTION SCALE

Items 1 to 10 measure Adjustment to Work

Items 11 to 20 measure Adjustment to Supervision

Items 1, 2, 3, 4, 5, 6, 19, and 20 are scored as follows:

A = 5

B = 4

C = 3

D = 2

E = 1

Items 7 to 18 are scored as follows:

A = 1

B = 2

C = 3

D = 4

E = 5

WHAT AN IDEAL SUPERVISOR SHOULD DO

Developed by staff members of
The Ohio State Leadership Studies

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On the following pages is a list of items that may be used to describe the behavior of a supervisor, as you think he should act. This is not a test of ability. It simply asks you to describe what you think an ideal leader ought to do in supervising a group in which you might be a member.

DIRECTIONS:

a. READ each item carefully.

b. THINK about how frequently a supervisor OUGHT to behave as described by the item.

c. DECIDE whether he SHOULD always, often, occasionally, seldom, or never act as described by the item.

d. DRAW A CIRCLE around one of the five letters following the item to show the answer you have selected.

A = Always
B = Often
C = Occasionally
D = Seldom
E = Never

e. MARK your answers as shown in the examples below.

Example: should often act as described . . . . . A (B) C D E

Example: should never act as described . . . . . A B C D (E)

Example: should occasionally act as described . . . A B (C) D E

A = Always
B = Often
C = Occasionally
D = Seldom
E = Never

HE OUGHT TO:

1. act as the spokesman of the group . . . . . A B C D E
2. let group members know what is expected of them . . . . . A B C D E
3. allow the members complete freedom in their work . . . . A B C D E
4. be friendly and approachable . . . . . A B C D E
5. encourage overtime work . . . . . A B C D E
6. publicize the activities of the group . . . . . A B C D E
7. encourage the use of uniform procedures . . . . . A B C D E
8. permit the members to use their own judgment in solving problems . . . . . A B C D E
9. do little things to make it pleasant to be a member of the group . . . . . A B C D E
10. stress being ahead of competing groups . . . . . A B C D E
11. speak as the representative of the group . . . . . A B C D E
12. try out his new ideas in the group . . . . . A B C D E
13. encourage initiative in the group members . . . . . A B C D E
14. put suggestions made by the group into operation . . . . A B C D E
15. needle members for greater effort . . . . . A B C D E
16. speak for the group when visitors are present . . . . . A B C D E
17. make his attitudes clear to the group . . . . . A B C D E
18. let the members do their work the way they think best . . A B C D E
19. treat all group members as his equals . . . . . A B C D E
20. keep the work moving at a rapid pace . . . . . A B C D E
21. represent the group at outside meetings . . . . . A B C D E
22. decide what shall be done and how it shall be done . . . A B C D E

A = Always
B = Often
C = Occasionally
D = Seldom
E = Never

23. assign a task, then let the members handle it . . . . . A B C D E
24. give advance notice of changes . . . . . A B C D E
25. push for increased production . . . . . A B C D E
26. know a large number of people . . . . . A B C D E
27. assign group members to their jobs . . . . . A B C D E
28. turn the members loose on a job, and let them go to it . A B C D E
29. keep to himself . . . . . A B C D E
30. ask the members to work harder . . . . . A B C D E
31. show visitors what is being done . . . . . A B C D E
32. make sure that his part in the group is understood by the group members . . . . . A B C D E
33. refuse to allow the members any freedom of action . . . . A B C D E
34. look out for the personal welfare of group members . . . A B C D E
35. permit the members to take it easy in their work . . . . A B C D E
36. prepare publicity materials . . . . . A B C D E
37. schedule the work to be done . . . . . A B C D E
38. allow the group a high degree of initiative . . . . . A B C D E
39. be willing to make changes . . . . . A B C D E
40. drive hard when there is a job to be done . . . . . A B C D E
41. write for publication . . . . . A B C D E
42. maintain definite standards of performance . . . . . A B C D E
43. trust the members to exercise good judgment . . . . . A B C D E
44. explain his actions fully . . . . . A B C D E
45. urge the group to beat its previous record . . . . . A B C D E
46. speak for the entire organization . . . . . A B C D E

A = Always
B = Often
C = Occasionally
D = Seldom
E = Never

47. ask that group members follow standard rules and regulations . . . . . A B C D E

48. permit the group to set its own pace . . . . . A B C D E

49. act without consulting the group . . . . . A B C D E

50. keep the group working to capacity . . . . . A B C D E

WHAT AN IDEAL LEADER SHOULD DO

The items in each subscale are as follows:

Subscale	Items									
Representation	1	6	11	16	21	26	31	36	41	46
Structure	2	7	12	17	22	27	32	37	42	47
Freedom	3	8	13	18	23	28	33	38	43	48
Consideration	4	9	14	19	24	29	34	39	44	49
Production	5	10	15	20	25	30	35	40	45	50

Items 29, 33, 35, and 49 are scored as follows:

A = 1

B = 2

C = 3

D = 4

E = 5

All other items are scored as follows:

A = 5

B = 4

C = 3

D = 2

E = 1